FIG. 1

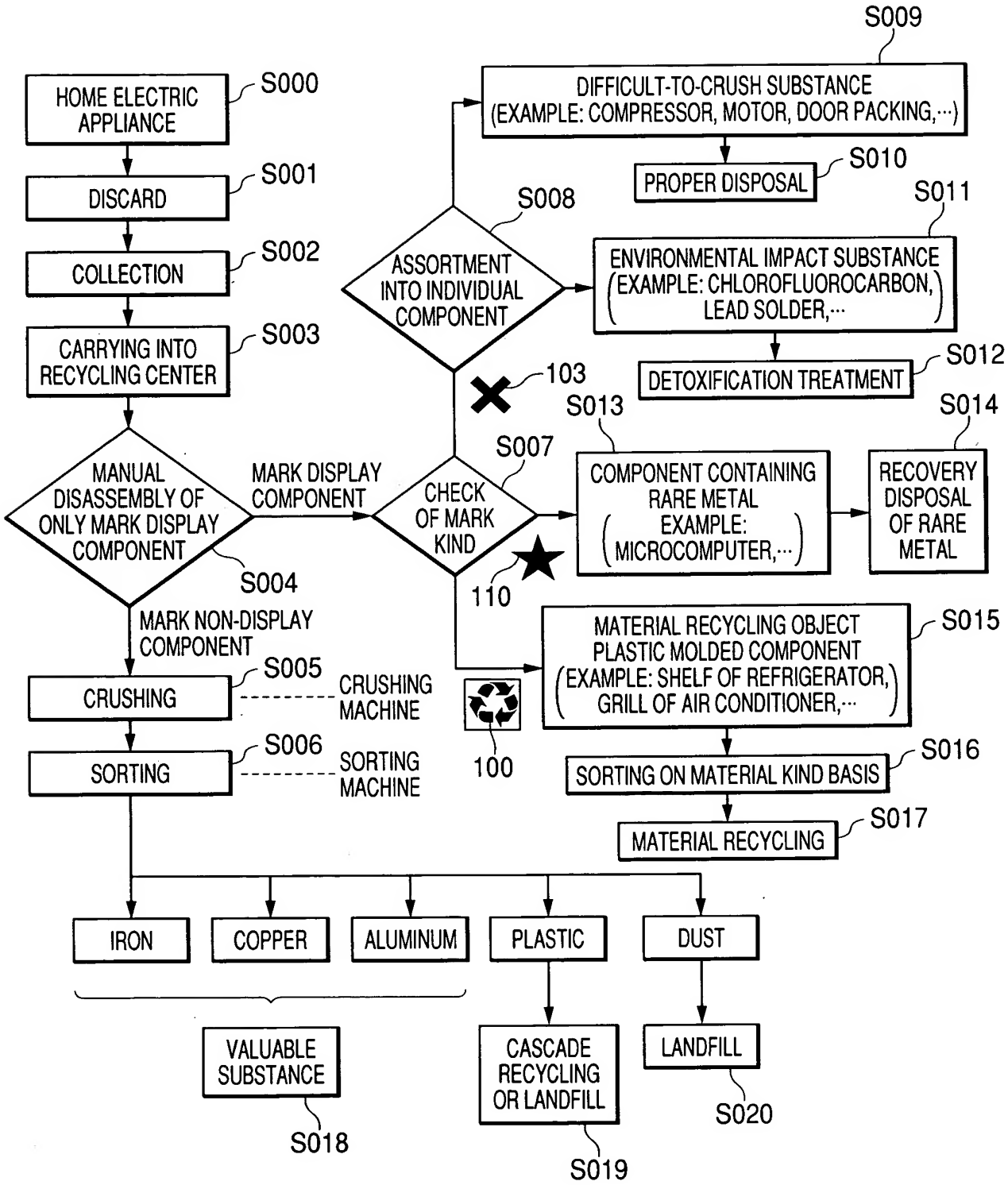

HOME ELECTRIC APPLIANCE
S000
DISCARD
S001
COLLECTION
S002
CARRYING INTO RECYCLING CENTER
S003
MANUAL DISASSEMBLY OF ONLY MARK DISPLAY COMPONENT
S004
MARK DISPLAY COMPONENT
MARK NON-DISPLAY COMPONENT
CRUSHING
S005
CRUSHING MACHINE
SORTING
S006
SORTING MACHINE
CHECK OF MARK KIND
S007
ASSORTMENT INTO INDIVIDUAL COMPONENT
S008
DIFFICULT-TO-CRUSH SUBSTANCE (EXAMPLE: COMPRESSOR, MOTOR, DOOR PACKING,···)
S009
PROPER DISPOSAL
S010
ENVIRONMENTAL IMPACT SUBSTANCE (EXAMPLE: CHLOROFLUOROCARBON, LEAD SOLDER,···
S011
DETOXIFICATION TREATMENT
S012
103
COMPONENT CONTAINING RARE METAL EXAMPLE: MICROCOMPUTER,···
S013
RECOVERY DISPOSAL OF RARE METAL
S014
110
MATERIAL RECYCLING OBJECT PLASTIC MOLDED COMPONENT (EXAMPLE: SHELF OF REFRIGERATOR, GRILL OF AIR CONDITIONER,···
S015
100
SORTING ON MATERIAL KIND BASIS
S016
MATERIAL RECYCLING
S017
IRON
COPPER
ALUMINUM
PLASTIC
DUST
VALUABLE SUBSTANCE
S018
CASCADE RECYCLING OR LANDFILL
S019
LANDFILL
S020

FIG. 2(a)

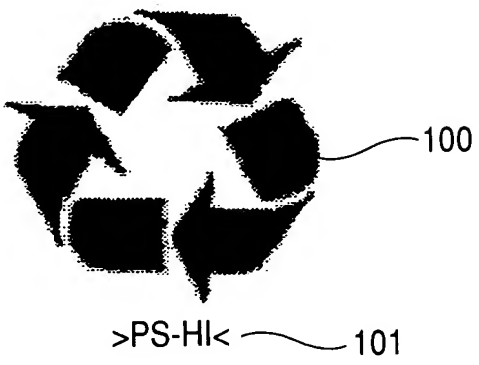


FIG. 2(b)

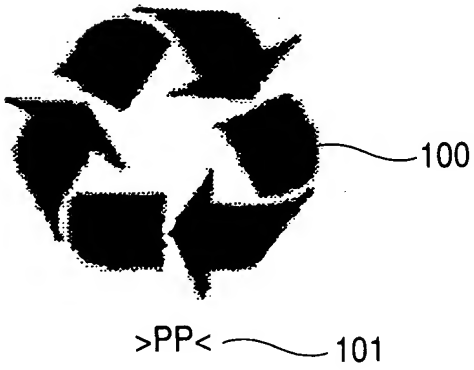


FIG. 3(a)

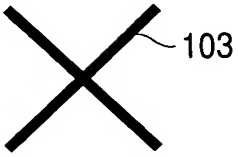


FIG. 3(b)

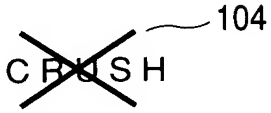


FIG. 3(c)

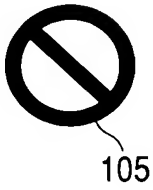


FIG. 3(d)

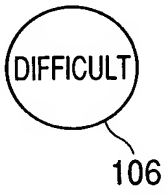


FIG. 3(e)

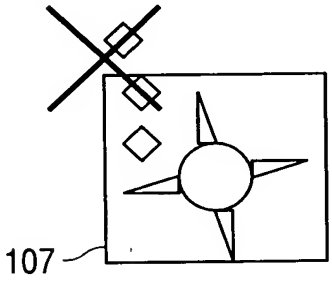


FIG. 3(f)

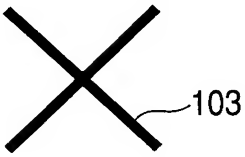


FIG. 3(g)

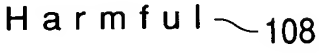


FIG. 3(h)

FIG. 3(i)

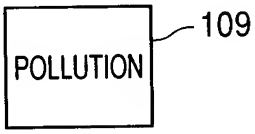


FIG. 3(j)

FIG. 3(k)

FIG. 3(l)

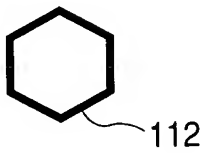


FIG. 3(m)

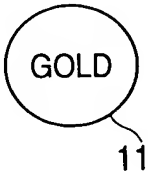


FIG. 4

	MATERIAL COST	WORK COST	REVENUE	PRODUCT COST
REVENUE	VALUABLE AMOUNT	-	USER BURDEN AMOUNT	-
EXPENDITURE	INVERSE ONEROUS AMOUNT	SCRAPPING TIME	-	MEASURE COST

FIG. 5

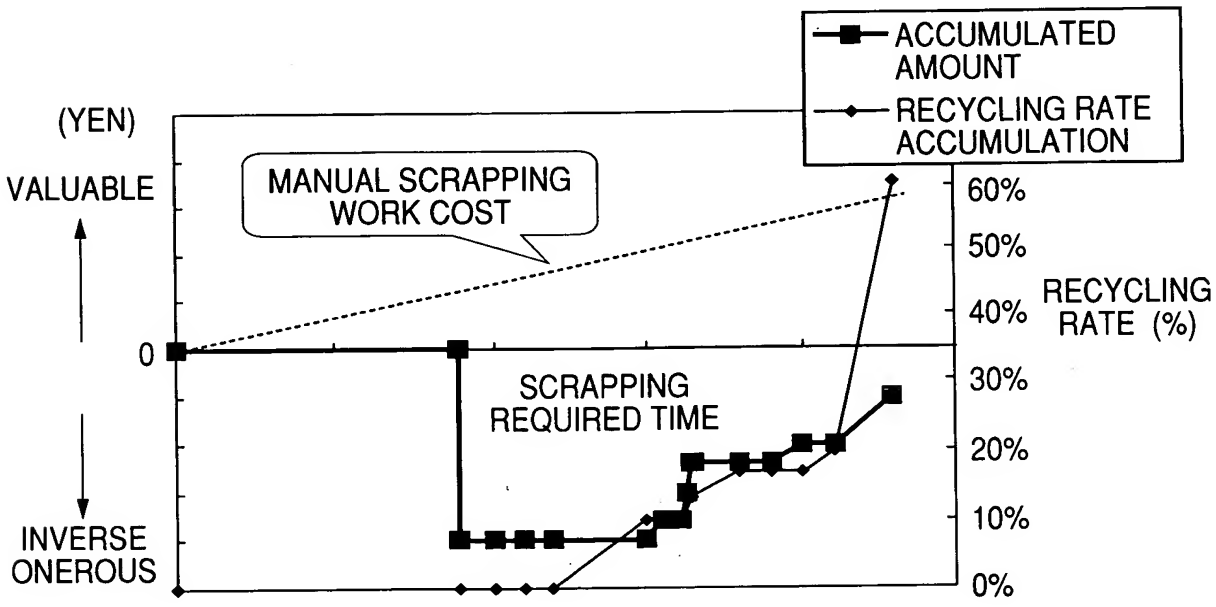


FIG. 6

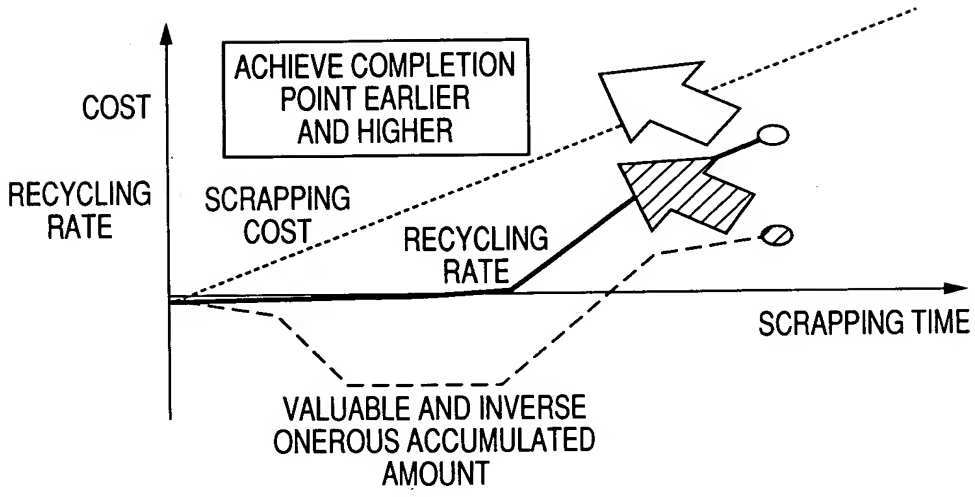

COST
RECYCLING RATE
ACHIEVE COMPLETION POINT EARLIER AND HIGHER
SCRAPPING COST
RECYCLING RATE
SCRAPPING TIME
VALUABLE AND INVERSE ONEROUS ACCUMULATED AMOUNT

FIG. 7

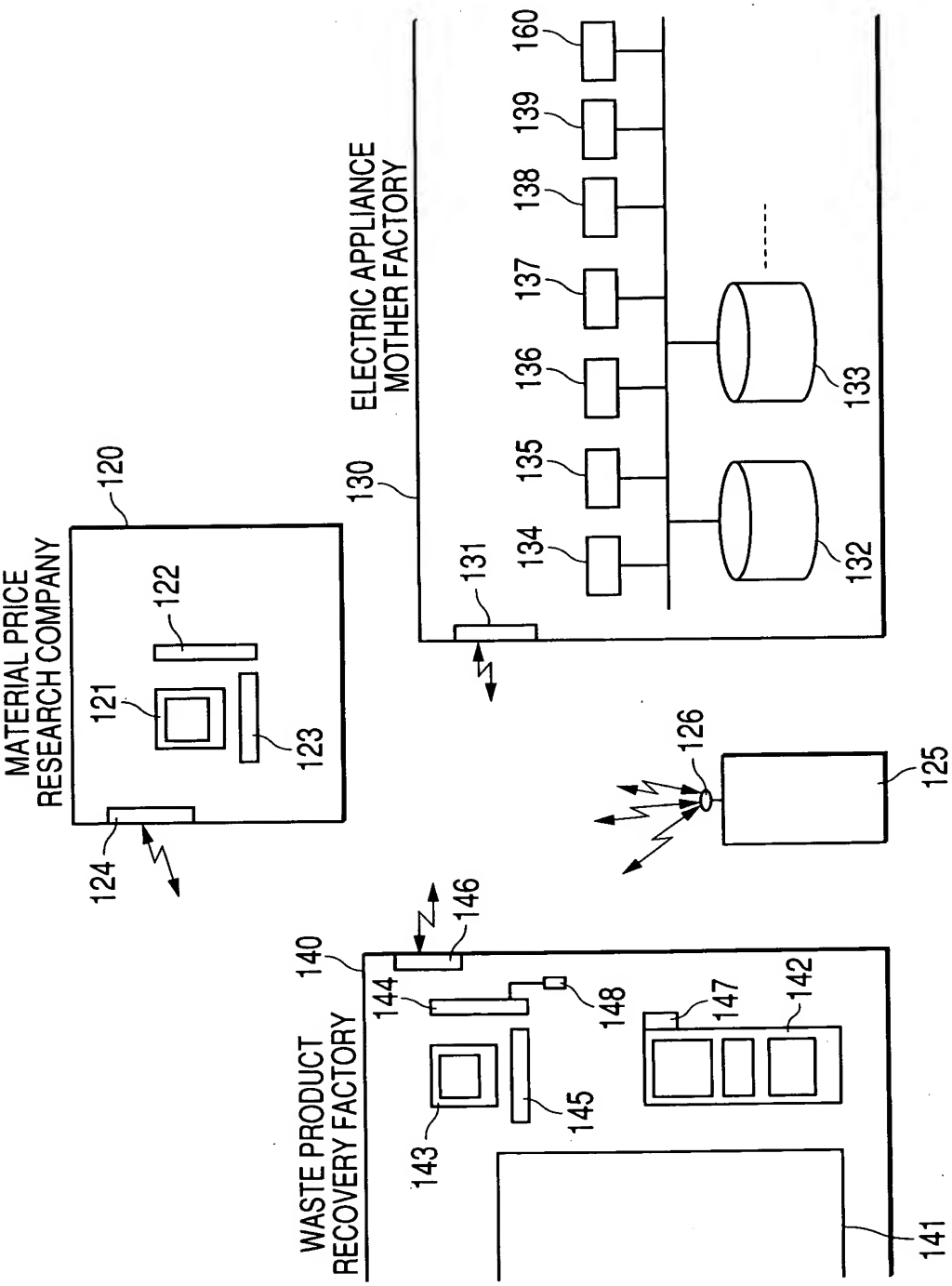

MATERIAL PRICE RESEARCH COMPANY
120
121
122
123
124
ELECTRIC APPLIANCE MOTHER FACTORY
130
131
132
133
134
135
136
137
138
139
160
126
125
WASTE PRODUCT RECOVERY FACTORY
140
141
142
143
144
145
146
147
148

FIG. 8

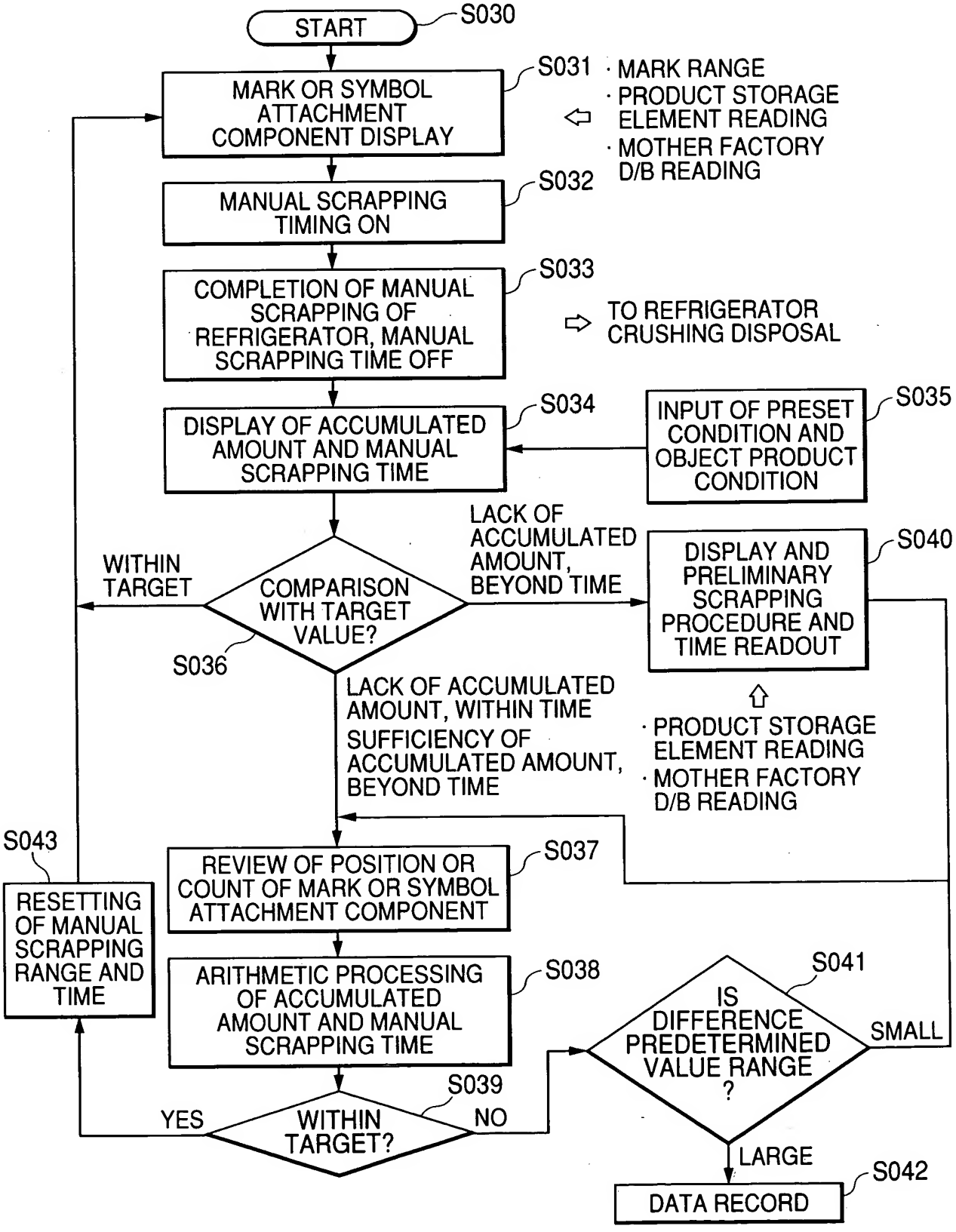
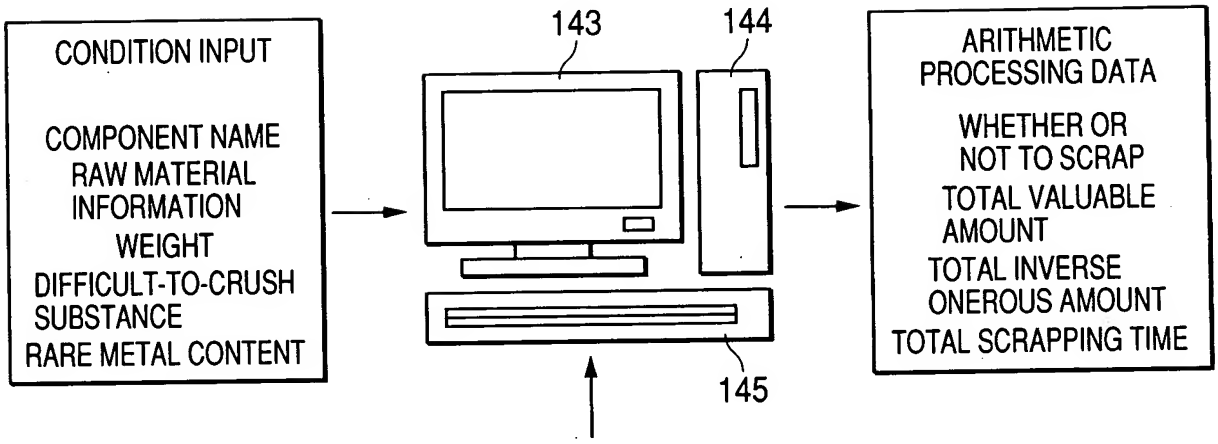
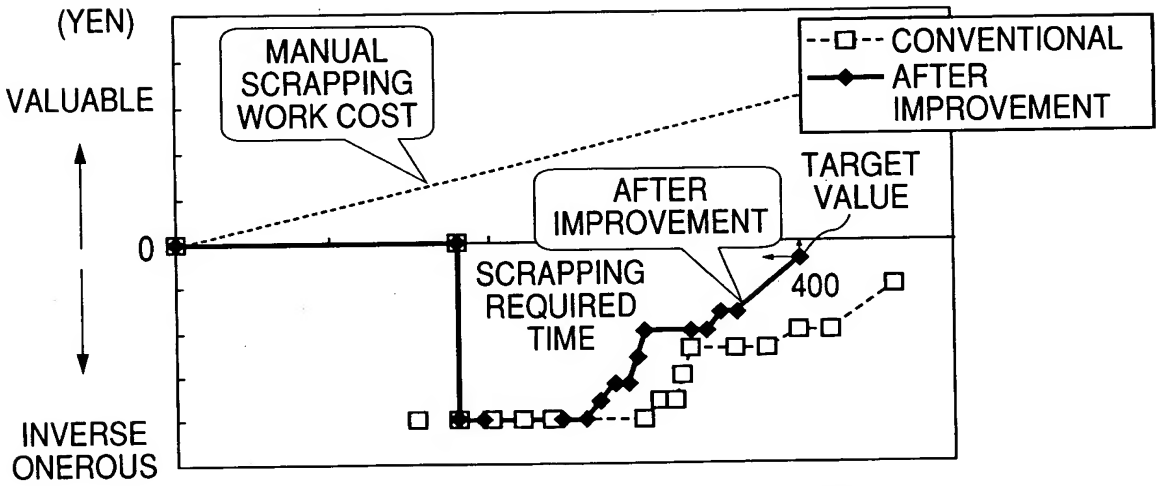

START
S030
MARK OR SYMBOL ATTACHMENT COMPONENT DISPLAY
S031
· MARK RANGE
· PRODUCT STORAGE ELEMENT READING
· MOTHER FACTORY D/B READING
MANUAL SCRAPPING TIMING ON
S032
COMPLETION OF MANUAL SCRAPPING OF REFRIGERATOR, MANUAL SCRAPPING TIME OFF
S033
TO REFRIGERATOR CRUSHING DISPOSAL
DISPLAY OF ACCUMULATED AMOUNT AND MANUAL SCRAPPING TIME
S034
INPUT OF PRESET CONDITION AND OBJECT PRODUCT CONDITION
S035
LACK OF ACCUMULATED AMOUNT, BEYOND TIME
WITHIN TARGET
COMPARISON WITH TARGET VALUE?
S036
DISPLAY AND PRELIMINARY SCRAPPING PROCEDURE AND TIME READOUT
S040
LACK OF ACCUMULATED AMOUNT, WITHIN TIME
SUFFICIENCY OF ACCUMULATED AMOUNT, BEYOND TIME
· PRODUCT STORAGE ELEMENT READING
· MOTHER FACTORY D/B READING
S043
RESETTING OF MANUAL SCRAPPING RANGE AND TIME
REVIEW OF POSITION OR COUNT OF MARK OR SYMBOL ATTACHMENT COMPONENT
S037
ARITHMETIC PROCESSING OF ACCUMULATED AMOUNT AND MANUAL SCRAPPING TIME
S038
IS DIFFERENCE PREDETERMINED VALUE RANGE ?
S041
SMALL
YES
WITHIN TARGET?
S039
NO
LARGE
DATA RECORD
S042

FIG. 9



PRESET CONDITION		
VALUABLE AMOUNT	IRON	¥200/kg
	ALUMINUM	¥350/kg
	COPPER	¥260/kg
	ABS	¥50/kg
	PP	¥20/kg
	PS	¥10/kg
INVERSE ONEROUS AMOUNT	GENERAL WASTE SUBSTANCE	-¥200/kg
	CHLOROFLUOROCARBON	-¥1000/kg
	HARMFUL WASTE SUBSTANCE	-¥2000/kg
STANDARD SCRAPPING TIME EVERY COMPONENT		
STANDARD SCRAPPING COST PER TIME		
PRODUCT STANDARD SCRAPPING PROCEDURE		
COMPONENT NAME		

FIG. 10



IMPROVEMENT EFFECT OF VALUABLE AND INVERSE ONEROUS ACCUMULATED AMOUNT

FIG. 11

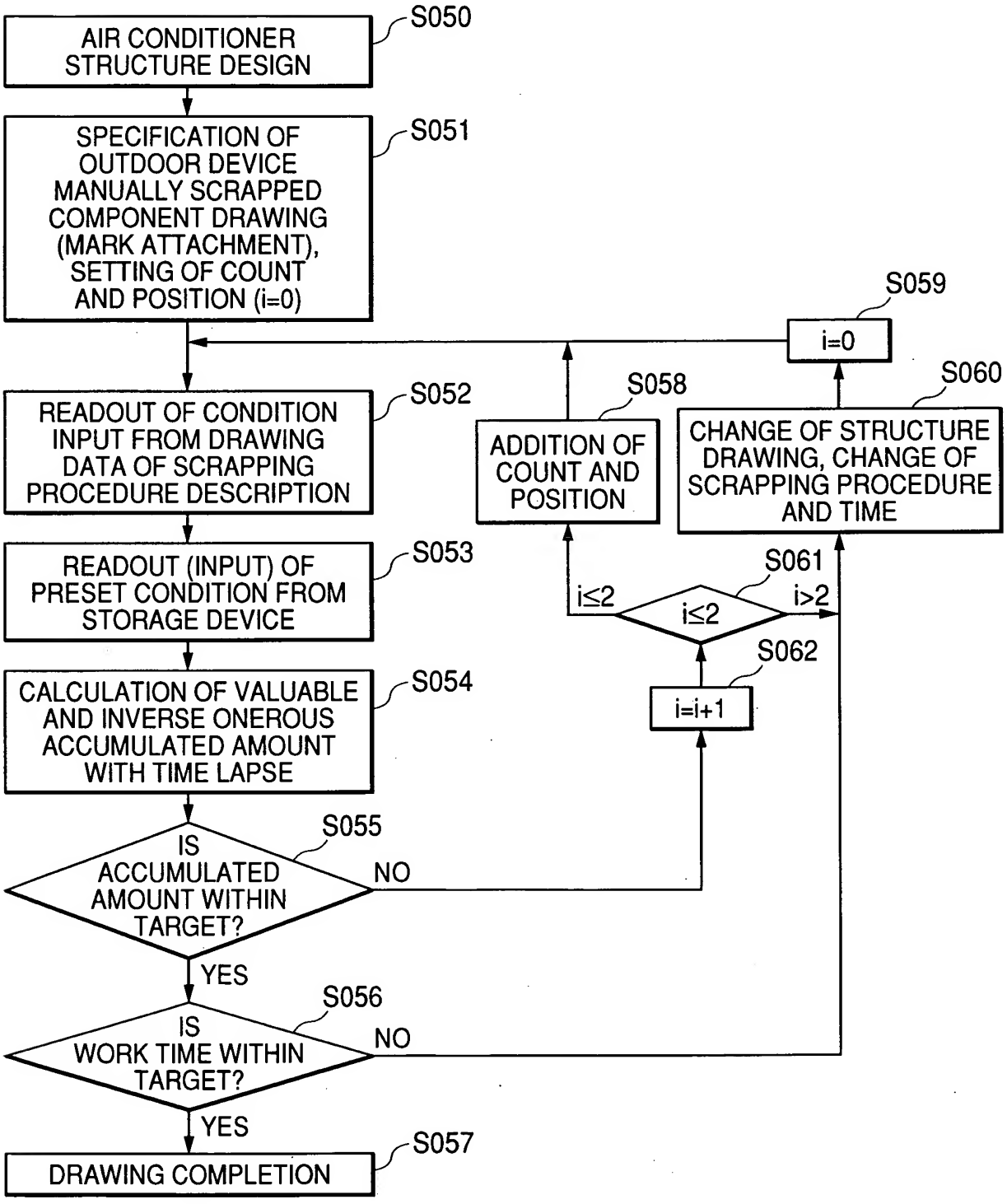

AIR CONDITIONER STRUCTURE DESIGN
S050
SPECIFICATION OF OUTDOOR DEVICE MANUALLY SCRAPPED COMPONENT DRAWING (MARK ATTACHMENT), SETTING OF COUNT AND POSITION (i=0)
S051
READOUT OF CONDITION INPUT FROM DRAWING DATA OF SCRAPPING PROCEDURE DESCRIPTION
S052
READOUT (INPUT) OF PRESET CONDITION FROM STORAGE DEVICE
S053
CALCULATION OF VALUABLE AND INVERSE ONEROUS ACCUMULATED AMOUNT WITH TIME LAPSE
S054
IS ACCUMULATED AMOUNT WITHIN TARGET?
S055
NO
YES
IS WORK TIME WITHIN TARGET?
S056
NO
YES
DRAWING COMPLETION
S057
ADDITION OF COUNT AND POSITION
S058
i=0
S059
CHANGE OF STRUCTURE DRAWING, CHANGE OF SCRAPPING PROCEDURE AND TIME
S060
i≤2
i≤2
i>2
S061
i=i+1
S062

FIG. 12

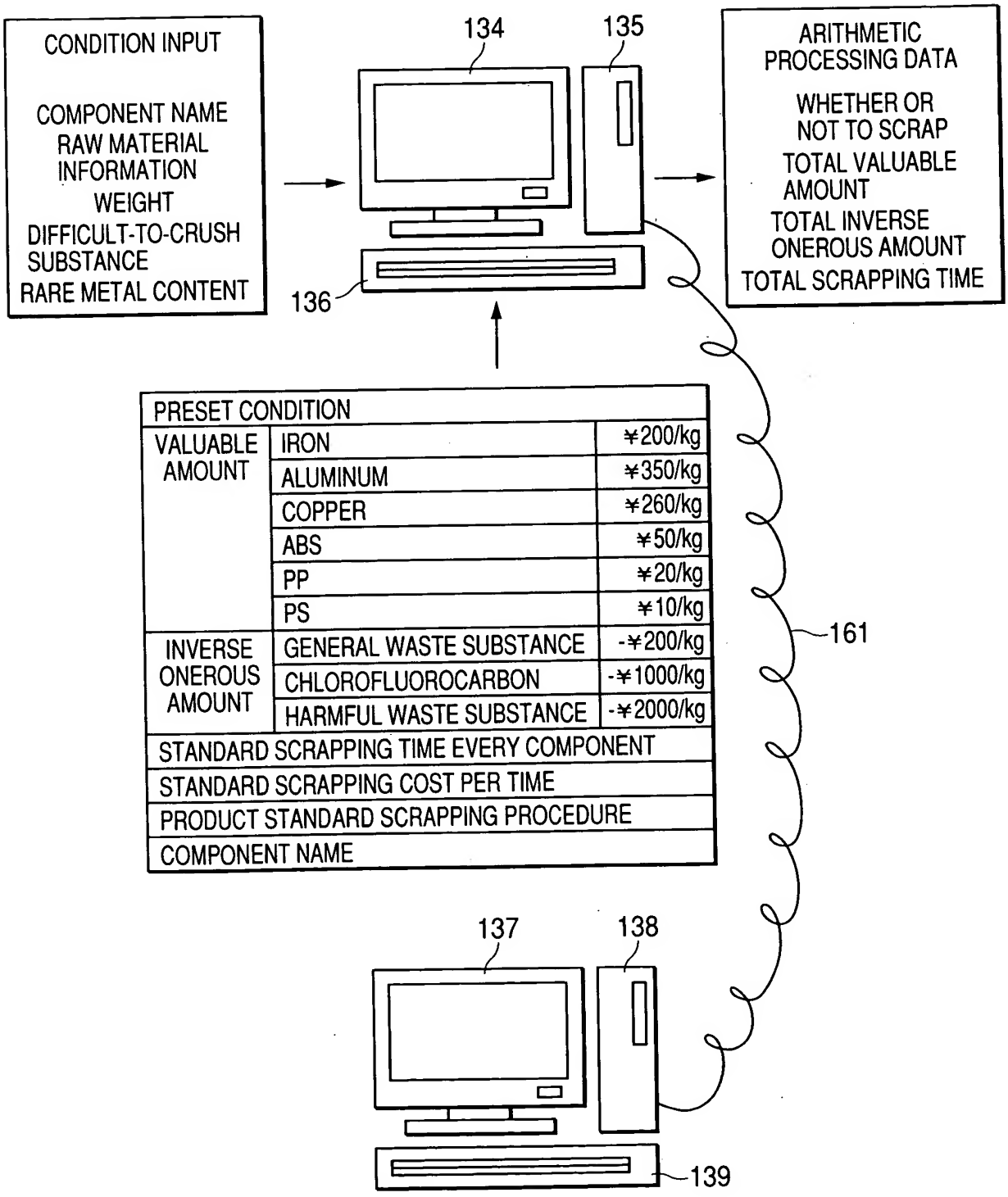
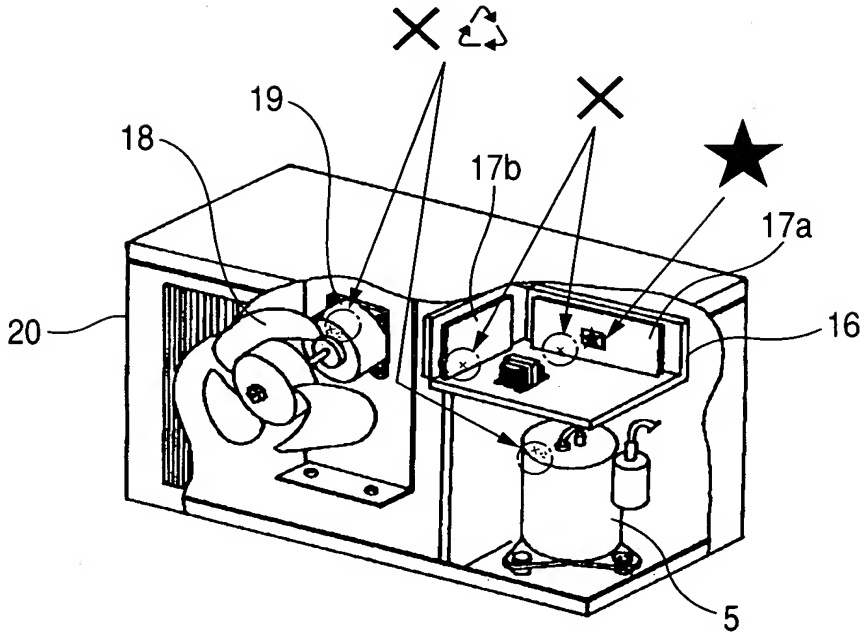
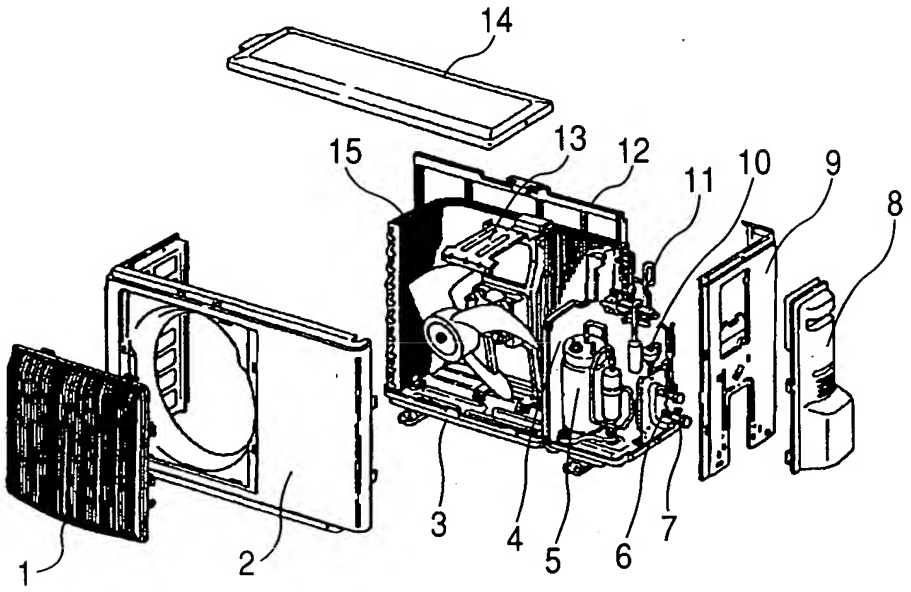

CONDITION INPUT
COMPONENT NAME
RAW MATERIAL INFORMATION
WEIGHT
DIFFICULT-TO-CRUSH SUBSTANCE
RARE METAL CONTENT
134
135
136
ARITHMETIC PROCESSING DATA
WHETHER OR NOT TO SCRAP
TOTAL VALUABLE AMOUNT
TOTAL INVERSE ONEROUS AMOUNT
TOTAL SCRAPPING TIME
PRESET CONDITION
VALUABLE AMOUNT
IRON ¥200/kg
ALUMINUM ¥350/kg
COPPER ¥260/kg
ABS ¥50/kg
PP ¥20/kg
PS ¥10/kg
INVERSE ONEROUS AMOUNT
GENERAL WASTE SUBSTANCE -¥200/kg
CHLOROFLUOROCARBON -¥1000/kg
HARMFUL WASTE SUBSTANCE -¥2000/kg
STANDARD SCRAPPING TIME EVERY COMPONENT
STANDARD SCRAPPING COST PER TIME
PRODUCT STANDARD SCRAPPING PROCEDURE
COMPONENT NAME
161
137
138
139

FIG. 13



16: OUTDOOR ELECTRIC PRODUCT BOX
17: OUTDOOR CONTROL BOARD

FIG. 14



REFERENCE NUMBER TO EXPLODED VIEW	COMPONENT NAME	MATERIAL	RECYCLING CODE	DIFFICULT-TO-CRUSH SUBSTANCE CODE
1	FAN COVER	POLYPROPYLENE	♺	
2	FRONT COVER	IRON	♺	
3	BASE	IRON	♺	
4	SEPARATOR	IRON	♺	
5	COMPRESSOR	IRON + COPPER + MAGNETIC SUBSTANCE	♺	×
6	STOP VALVE	COPPER ALLOY	♺	
7	STOP VALVE	COPPER ALLOY	♺	
8	SERVICE PANEL	POLYPROPYLENE	♺	
9	BACK PANEL	IRON	♺	
10	PIPE ASSEMBLY	COPPER	♺	
11	FOUR-WAY VALVE	COPPER ALLOY+IRON	♺	
12	CONDENSER NET	POLYPROPYLENE	♺	
13	MOTOR SUPPORT	IRON	♺	
14	TOP PANEL	IRON	♺	
15	HEAT EXCHANGER	ALUMINUM + COPPER	♺	

FIG. 15

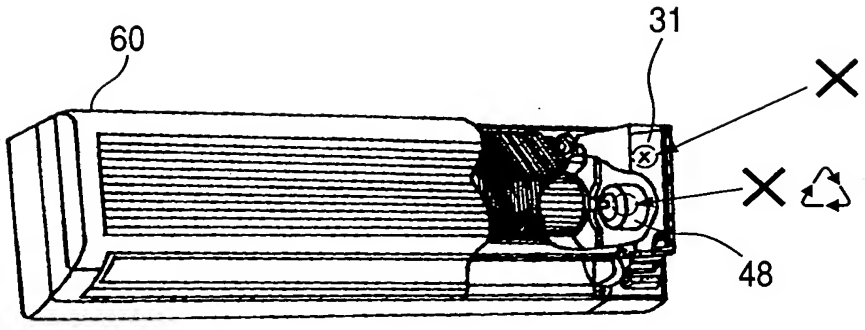
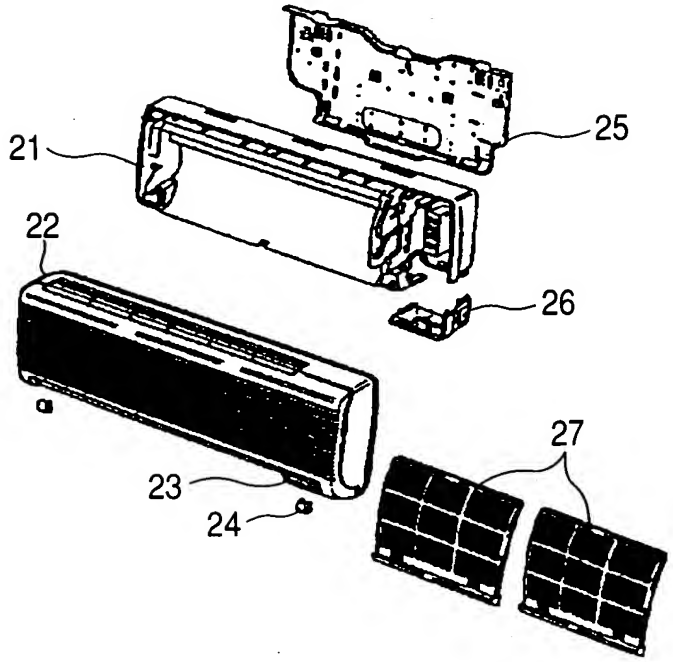
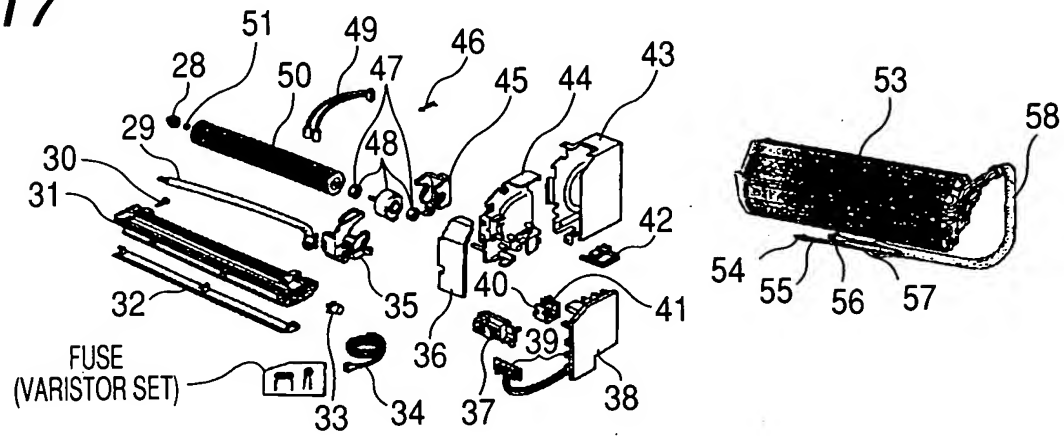


FIG. 16



REFERENCE NUMBER TO EXPLODED VIEW	COMPONENT NAME	MATERIAL	RECYCLING CODE	DIFFICULT-TO-CRUSH SUBSTANCE CODE
21	BOX	POLYSTYRENE	♺	
22	FRONT PANEL	POLYSTYRENE	♺	
23	DECORATION COVER	POLYPROPYLENE	♺	
24	SCRAW CAP	POLYSTYRENE	♺	
25	MOUNTING PLATE	IRON	♺	
26	CORNER BOX	POLYSTYRENE	♺	
27	AIR FILTER	POLYPROPYLENE		

FIG. 17



REFERENCE NUMBER TO EXPLODED VIEW	COMPONENT NAME	MATERIAL	RECYCLING CODE	DIFFICULT-TO-CRUSH SUBSTANCE CODE
28	BEARING MOUNT	CHLOROPRENE RUBBER		
29	DRAIN HOSE	VINYL CHLORIDE		
30	DRAIN CAP	CHLOROPRENE RUBBER		
31	NOZZLE	ACRYLONITRILE, BUTADIENE, STYRENE + FOAM PS		×
32	VANE	POLYSTYRENE	♺	
33	VANE MOTOR	IRON + POLYACETAL	♺	
34	POWER SOURCE CORD	COPPER + VINYL CHLORIDE	♺	
35	MOTOR BAND	ACRYLONITRILE, BUTADIENE, STYRENE	♺	
36	ELECTRIC PRODUCT COVER	IRON	♺	
37	LIGHT RECEIVING BOARD HOLDER	POLYPROPYLENE	♺	
38	BOARD COVER	FLAME-RESISTANT ACRYLONITRILE, BUTADIENE, STYRENE (FLAME-RESISTANT ABS)	♺	
39	INDOOR CONTROL BOARD	PAPER PHENOL		
40	TERMINAL PLATE	UNSATURATED POLYESTER (MICROCOMPUTER PORTION INCLUDES GOLD)		
41	TEMPERATURE FUSE			
42	TERMINAL PLATE COVER	POLYCARBONATE	♺	
43	ELECTRIC PRODUCT BOX	IRON	♺	
44	BOARD BOX	FLAME-RESISTANT ACRYLONITRILE, BUTADIENE, STYRENE (FLAME-RESISTANT ABS)	♺	
45	MOTOR COVER	ACRYLONITRILE, BUTADIENE, STYRENE	♺	
46	ROOM TEMPERATURE THERMISTOR			
47	RUBBER MOUNT	CHLOROPRENE RUBBER		
48	FAN MOTOR	IRON + COPPER + MAGNETIC SUBSTANCE + UNSATURATED POLYESTER	♺	×
49	PIPE TEMPERATURE THERMISTOR			
50	LINE FLOW FAN	STYRENE, ACRYLONITRILE + GLASS		
51	BEARING			
52	INDOOR ELECTRIC WIRING DIAGRAM	PAPER		
53	HEAT EXCHANGER	COPPER + ALUMINUM	♺	
54	UNION	COPPER ALLOY	♺	
55	COPPER PIPE	COPPER	♺	
56	UNION	COPPER ALLOY	♺	
57	COPPER PIPE	COPPER	♺	
58	PIPE COVER			

FIG. 18

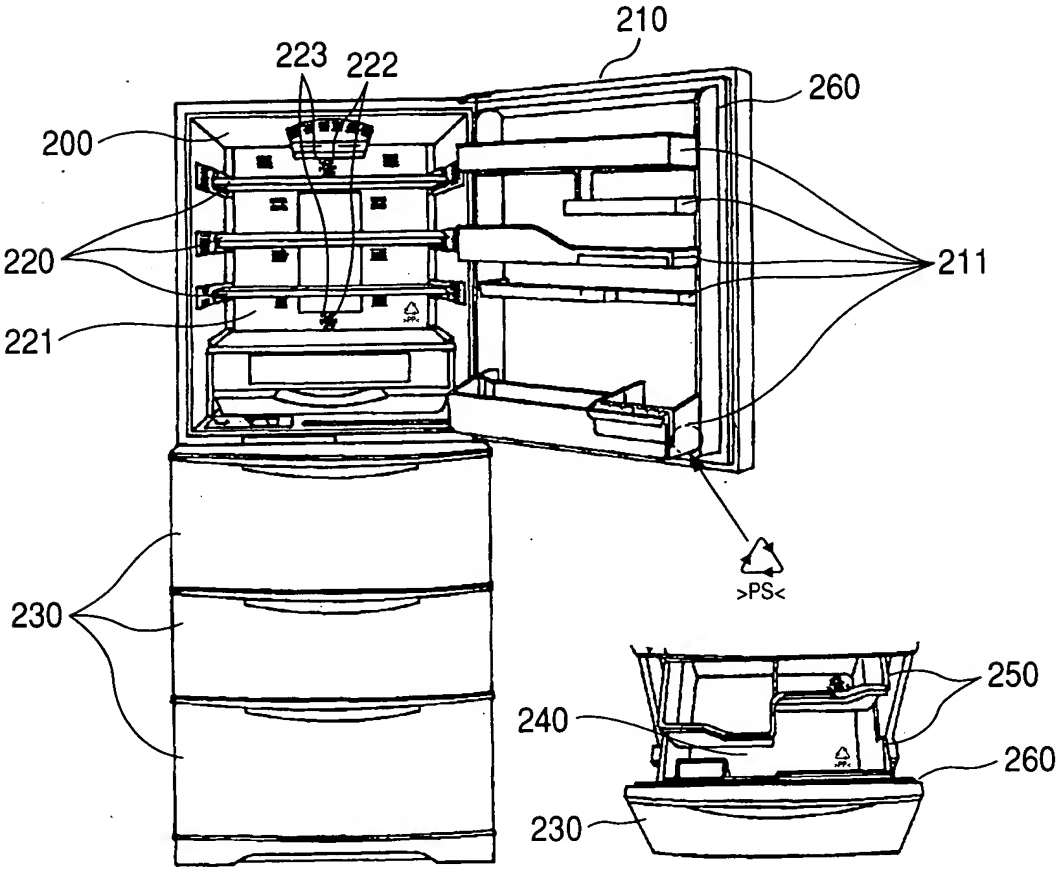


FIG. 19

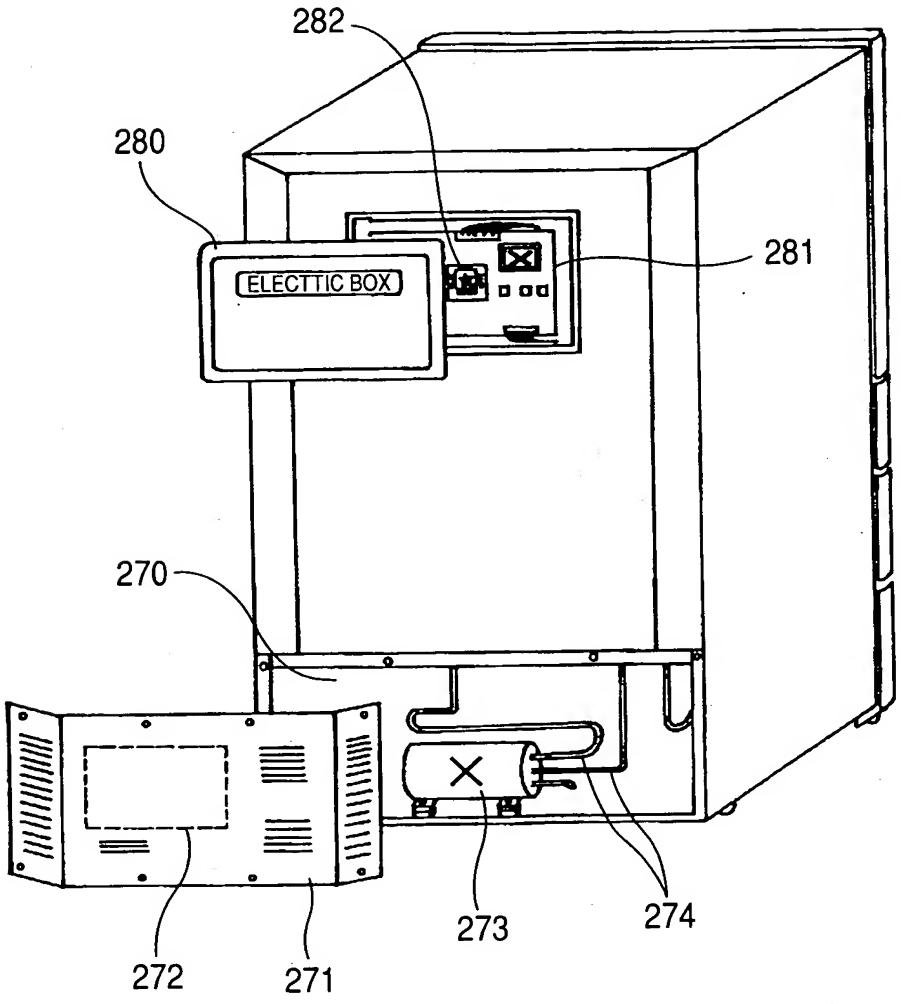
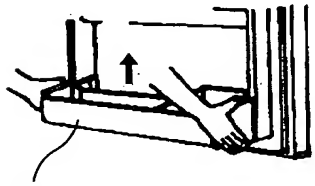
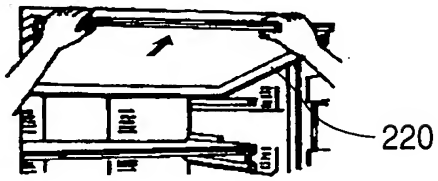


FIG. 20

REMOVAL METHOD
OF DOOR POCKET



REMOVAL METHOD OF
INSIDE PLASTIC SHELF



REMOVAL METHOD
OF FOOD STOCK CASE

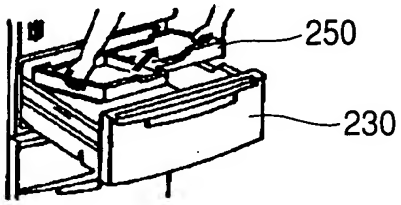


FIG. 21(a)

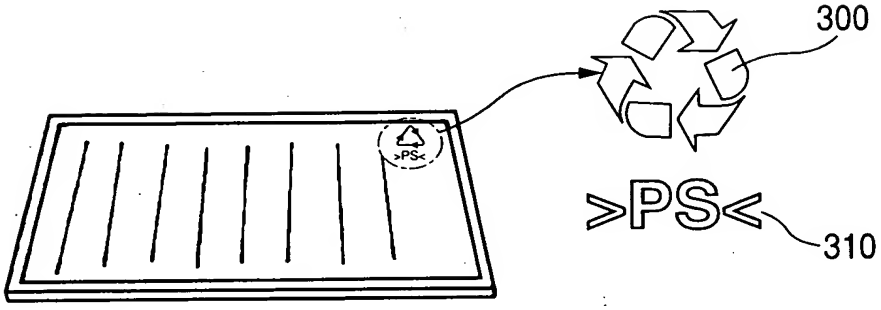


FIG. 21(b)

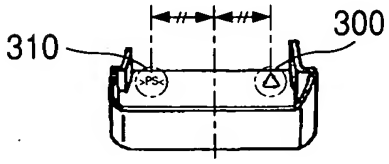


FIG. 22(a)

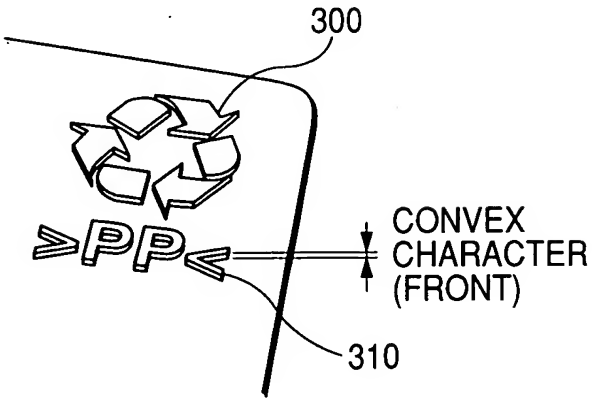


FIG. 22(b)

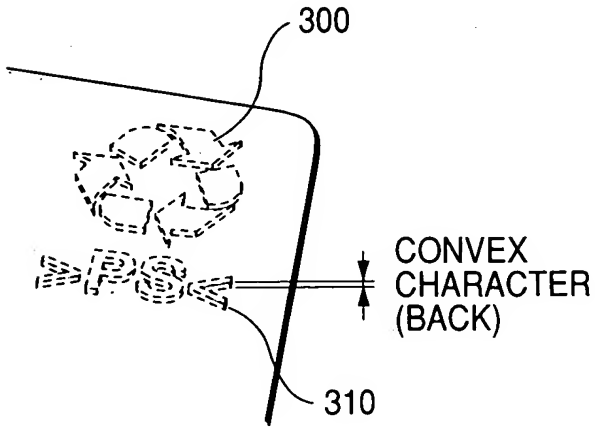


FIG. 23(a)

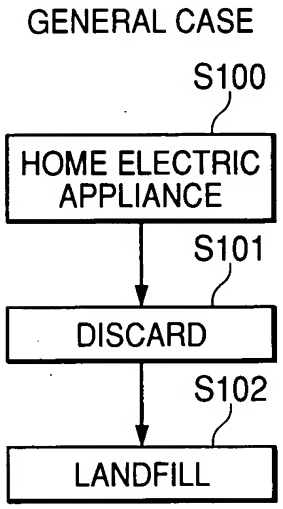


FIG. 23(b)